FIG. 1

Prior Art

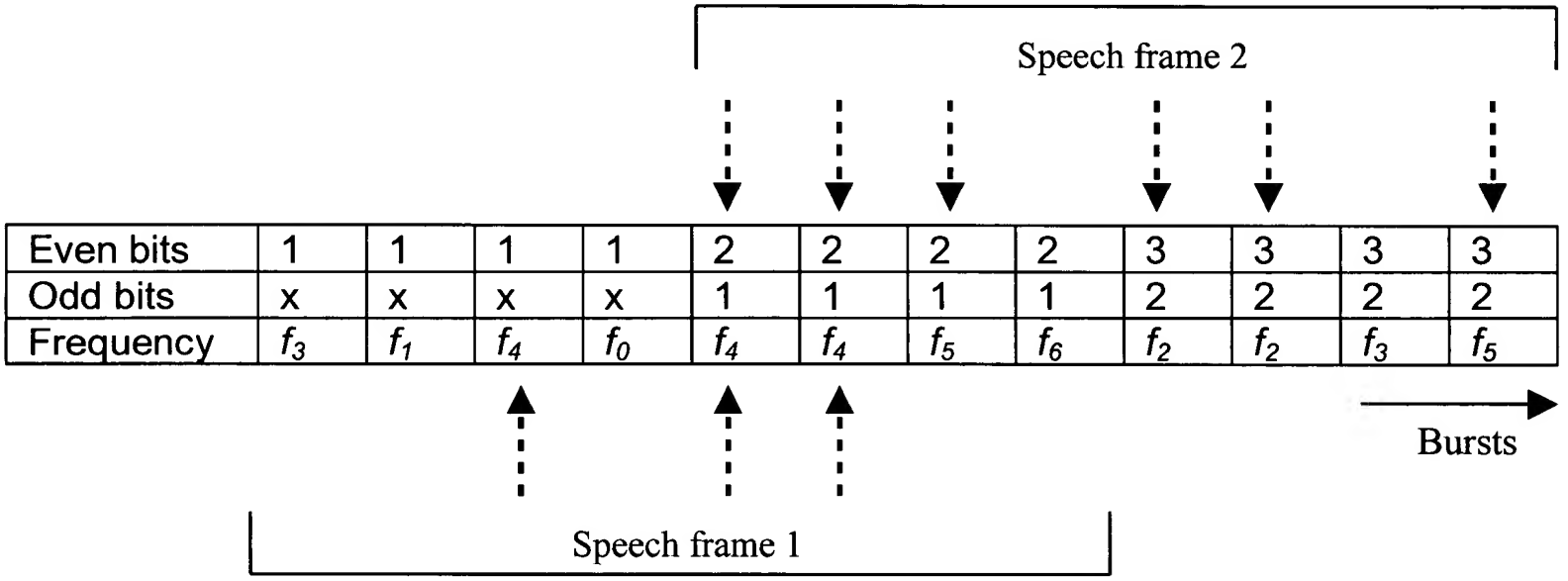

FIG. 2 Balachandran-Kang-Sanwal-Seymour 21-1-3-12

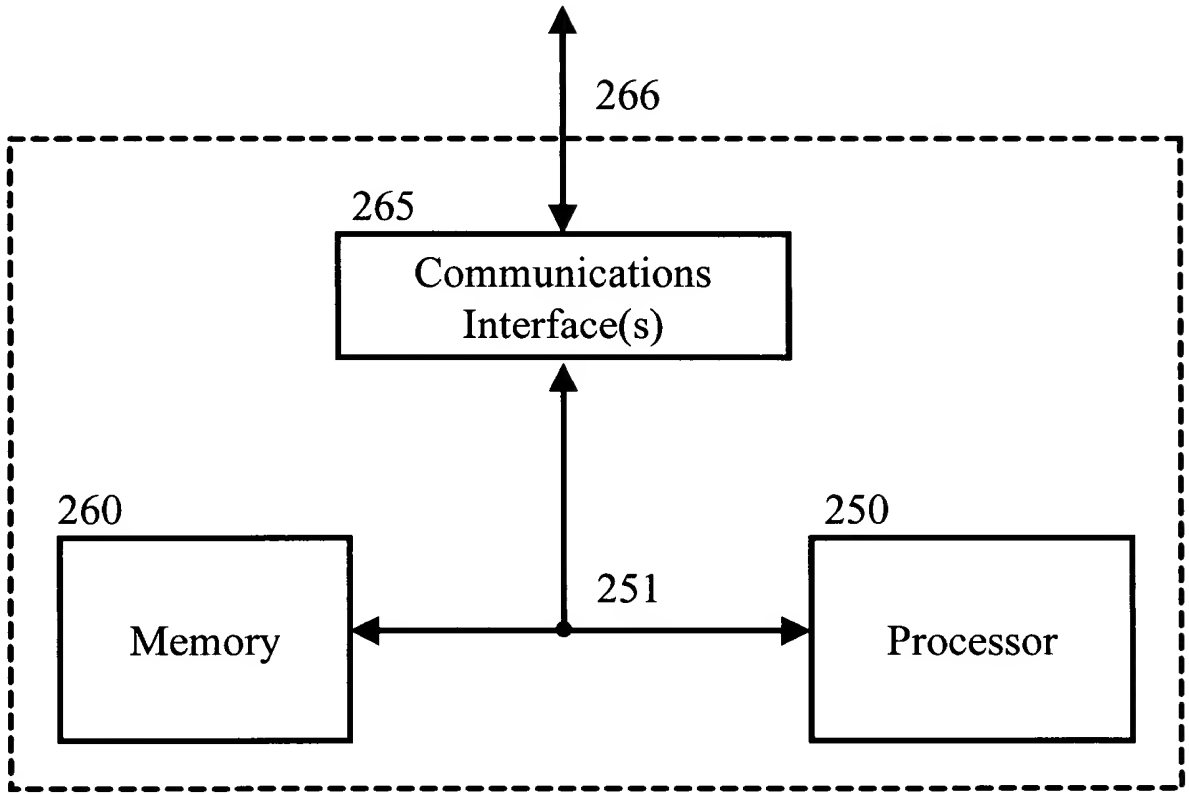

FIG. 3

Even bits	1	1	1	1	2	2	2	2	3	3	3	3
Odd bits	x	x	x	x	1	1	1	1	2	2	2	2
Frequency	f_3	f_1	f_4	f_0	f_7	f_8	f_5	f_6	f_1	f_3	f_0	f_4

Bursts

Speech frame 1

FIG. 4

Prior Art

Parameter	Definition	Range
TDMA Frame Number, *FN*	TDMA frame number	0 to (26 x 51 x 2048) - 1
Time parameter, *T1R*	[FN div (26 x 51)] modulo 64	0 to 63
Time parameter, *T2*	FN modulo 26	0 to 25
Time parameter, *T3*	FN modulo 51	0 to 50
Hopping Sequence Number (*HSN*)	Used along with other time parameters to generate a pseudo-random hopping sequence	0 to 63
NBIN	Number of bits required to represent *N*	
xor	Bit-wise exclusive or of 8 bit binary operands	

Table One

FIG. 5

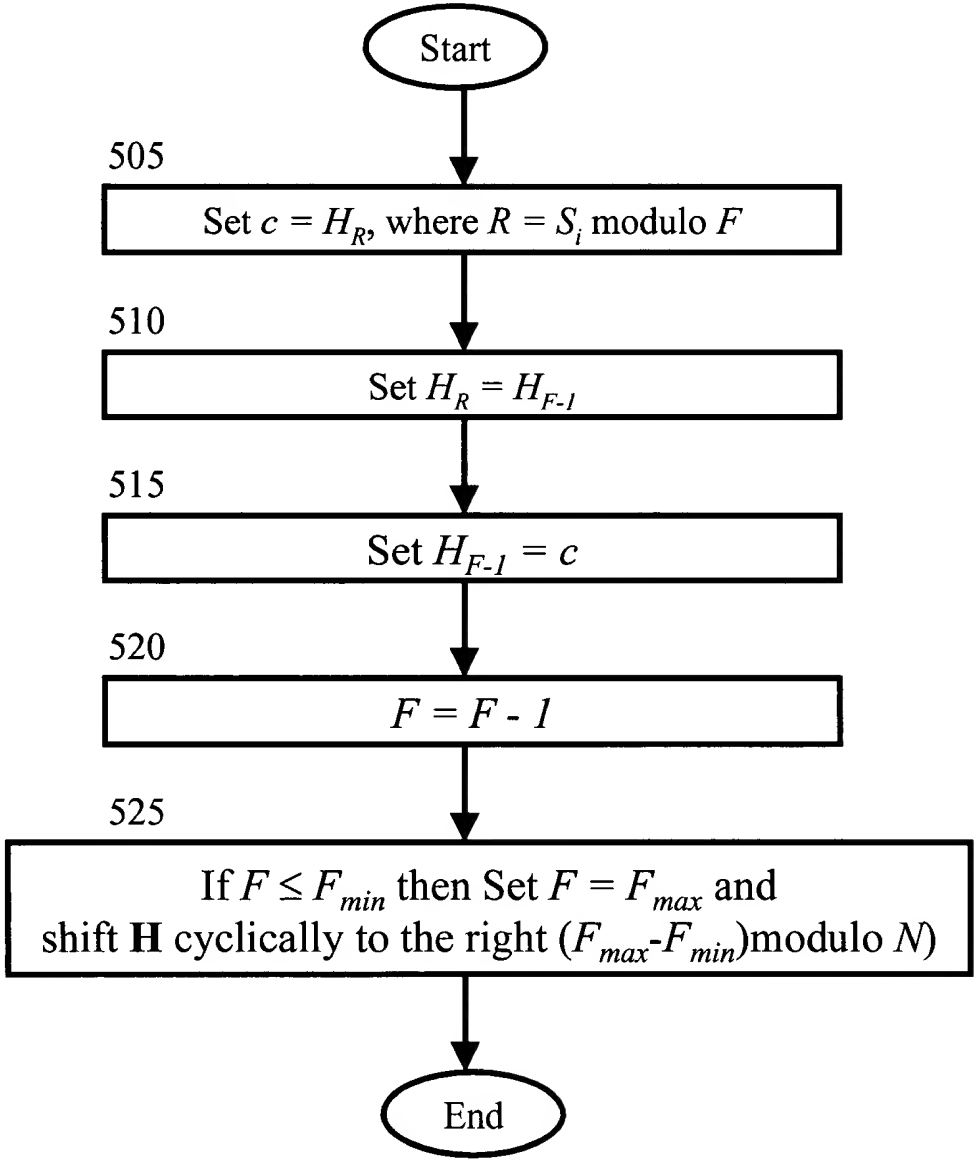
Start
505
Set $c = H_R$, where $R = S_i$ modulo F
510
Set $H_R = H_{F-1}$
515
Set $H_{F-1} = c$
520
$F = F - 1$
525
If $F \leq F_{min}$ then Set $F = F_{max}$ and
shift **H** cyclically to the right $(F_{max}-F_{min})$modulo N)
End

FIG. 6

column 1 ↓

row 1 →

Burst Number	Hopping index	**A**	Compute Hop Frequency	**H**	*F*
--	--	--	--	$\boldsymbol{H} = \{1\ 3\ 4\ 6\ 2\ 0\ 5\ 7\}$	$F = 4$
0	1	$\boldsymbol{A} = \{1\ 3\ 4\ 6\}$	$H_{(1 \bmod 4)} = H_1 = 3$	$\boldsymbol{H} = \{1\ 6\ 4\ 3\ 2\ 0\ 5\ 7\}$	$F = 3$
1	5	$\boldsymbol{A} = \{1\ 6\ 4\}$	$H_{(5 \bmod 3)} = H_2 = 4$	$\boldsymbol{H} = \{1\ 6\ 4\ 3\ 2\ 0\ 5\ 7\}$	$F = 2$
2	2	$\boldsymbol{A} = \{1\ 6\}$	$H_{(2 \bmod 2)} = H_0 = 1$	$\boldsymbol{H} = \{6\ 1\ 4\ 3\ 2\ 0\ 5\ 7\}$	$F = 1$
3	4	$\boldsymbol{A} = \{6\}$	$H_{(4 \bmod 1)} = H_0 = 6$	$\boldsymbol{H} = \{6\ 1\ 4\ 3\ 2\ 0\ 5\ 7\}$ $\boldsymbol{H} = \{2\ 0\ 5\ 7\ 6\ 1\ 4\ 3\}$	$F = 0,$ $F = 4$
4	1	$\boldsymbol{A} = \{2\ 0\ 5\ 7\}$	$H_{(1 \bmod 4)} = H_1 = 0$	$\boldsymbol{H} = \{2\ 7\ 5\ 0\ 6\ 1\ 4\ 3\}$	$F = 3$
•	•	•	•	•	•
•	•	•	•	•	•
•	•	•	•	•	•

Table Two